



WEAR	NORMAL
CONTAMINATION	NORMAL
FLUID CONDITION	NORMAL



Area
RO
Machine Id
13189
Component
Diesel Engine
Fluid
PETRO CANADA DURON SHP 10W30 (--- GAL)

RECOMMENDATION

Resample at the next service interval to monitor.

Test	UOM	Method	Limit/Abn	Current	History1	History2
Sample Number		Client Info		PC0083069	PC0061131	---
Sample Date		Client Info		28 Apr 2024	20 Jul 2022	---
Machine Age	hrs	Client Info		0	0	---
Oil Age	hrs	Client Info		0	0	---
Filter Age	hrs	Client Info		0	0	---
Oil Changed		Client Info		N/A	N/A	---
Filter Changed		Client Info		N/A	N/A	---
Sample Status				NORMAL	ABNORMAL	---

WEAR

All component wear rates are normal.

Iron	ppm	ASTM D5185(m)	>120	18	15	---
Chromium	ppm	ASTM D5185(m)	>20	0	0	---
Nickel	ppm	ASTM D5185(m)	>5	<1	<1	---
Titanium	ppm	ASTM D5185(m)	>2	0	<1	---
Silver	ppm	ASTM D5185(m)	>2	0	▲ 2	---
Aluminum	ppm	ASTM D5185(m)	>20	2	3	---
Lead	ppm	ASTM D5185(m)	>40	0	2	---
Copper	ppm	ASTM D5185(m)	>330	2	50	---
Tin	ppm	ASTM D5185(m)	>15	<1	1	---
Vanadium	ppm	ASTM D5185(m)		0	0	---
White Metal	scalar	Visual*	NONE	NONE	NONE	---
Yellow Metal	scalar	Visual*	NONE	NONE	NONE	---

CONTAMINATION

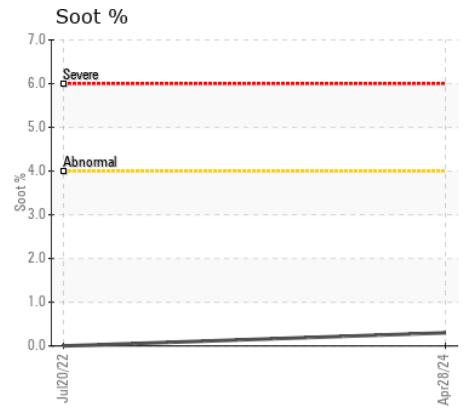
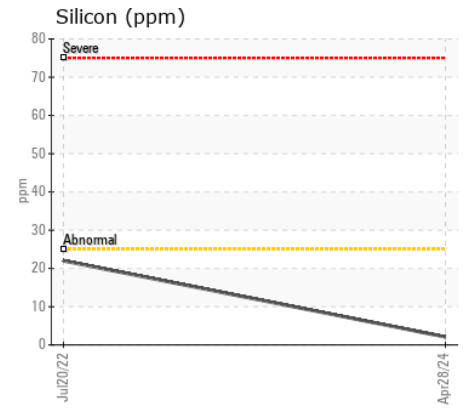
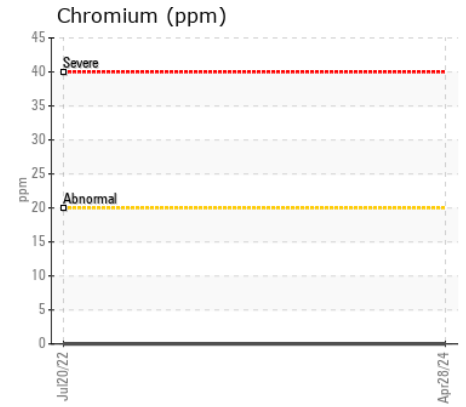
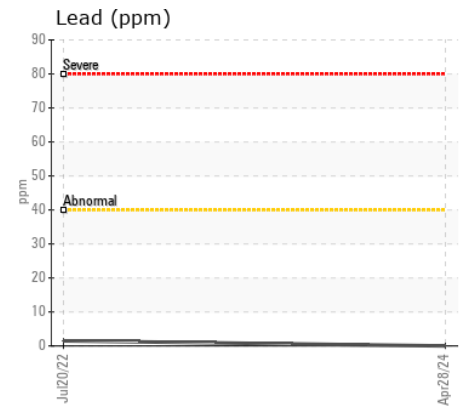
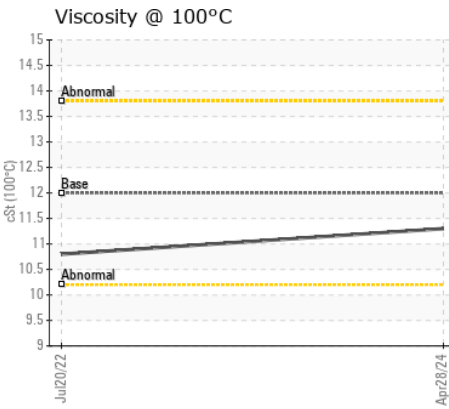
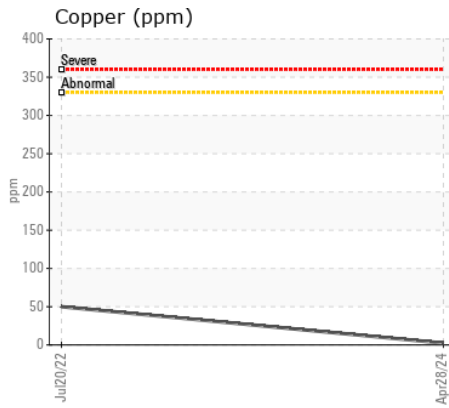
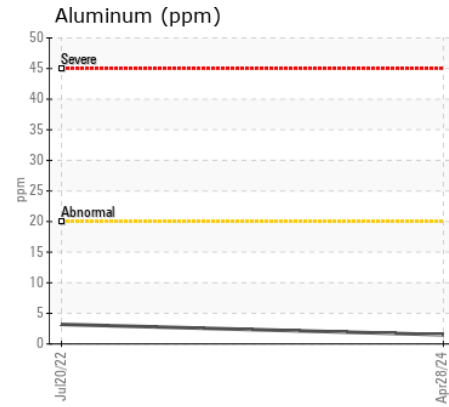
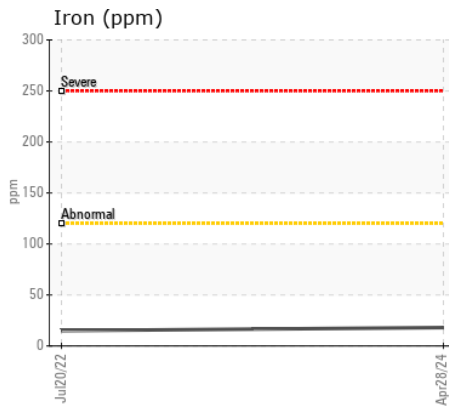
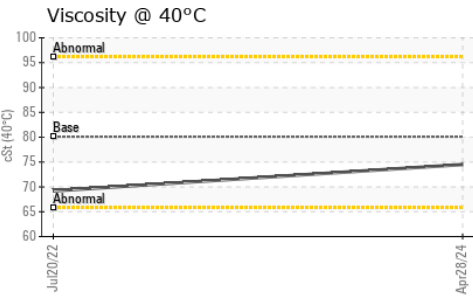
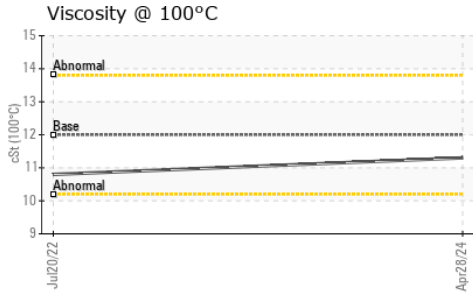
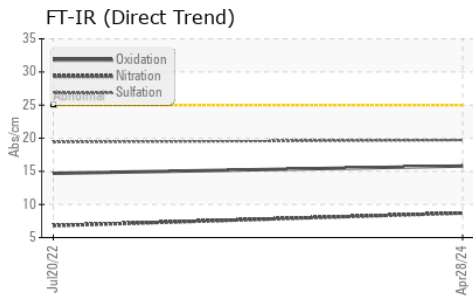
There is no indication of any contamination in the oil.

Silicon	ppm	ASTM D5185(m)	>25	2	22	---
Potassium	ppm	ASTM D5185(m)	>20	2	2	---
Fuel		WC Method	>3.0	<1.0	<1.0	---
Water		WC Method	>0.2	NEG	NEG	---
Glycol		WC Method		NEG	NEG	---
Soot %	%	ASTM D7844*	>4	0.3	0	---
Nitration	Abs/cm	ASTM D7624*	>20	8.7	6.8	---
Sulfation	Abs/.1mm	ASTM D7415*	>30	19.7	19.4	---
Silt	scalar	Visual*	NONE	NONE	NONE	---
Debris	scalar	Visual*	NONE	NONE	VLITE	---
Sand/Dirt	scalar	Visual*	NONE	NONE	NONE	---
Appearance	scalar	Visual*	NORML	NORML	NORML	---
Odor	scalar	Visual*	NORML	NORML	NORML	---
Emulsified Water	scalar	Visual*	>0.2	NEG	NEG	---

FLUID CONDITION

The condition of the oil is acceptable for the time in service.

Sodium	ppm	ASTM D5185(m)		<1	2	---
Boron	ppm	ASTM D5185(m)	2	7	49	---
Barium	ppm	ASTM D5185(m)	0	0	0	---
Molybdenum	ppm	ASTM D5185(m)	50	61	63	---
Manganese	ppm	ASTM D5185(m)	0	<1	<1	---
Magnesium	ppm	ASTM D5185(m)	950	953	923	---
Calcium	ppm	ASTM D5185(m)	1050	1060	1094	---
Phosphorus	ppm	ASTM D5185(m)	995	988	948	---
Zinc	ppm	ASTM D5185(m)	1180	1166	1142	---
Sulfur	ppm	ASTM D5185(m)	2600	2482	2643	---
Oxidation	Abs/.1mm	ASTM D7414*	>25	15.8	14.7	---
Visc @ 40°C	cSt	ASTM D7279(m)	80.1	74.5	69.2	---
Visc @ 100°C	cSt	ASTM D7279(m)	12.00	11.3	10.8	---
Viscosity Index (VI)	Scale	ASTM D2270*	144	143	145	---



ISO 17025:2017
Accredited
Laboratory

Laboratory : WearCheck - C8-1175 Appleby Line, Burlington, ON L7L 5H9
Sample No. : PC0083069
Lab Number : 02631878
Unique Number : 5773031
Test Package : MOB 1 (Additional Tests: KV40, VI, Visual)

Received : 29 Apr 2024
Tested : 29 Apr 2024
Diagnosed : 29 Apr 2024 - Wes Davis

To discuss this sample report, contact Customer Service at 1-800-268-2131.
 Test denoted (*) outside scope of accreditation, (m) method modified, (e) tested at external lab.
 Validity of results and interpretation are based on the sample and information as supplied.

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